

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A display device comprising:

a substrate having a display portion;

a gamma correction circuit provided over said substrate;

an image signal processing circuit provided over said substrate and connected with an output line of said gamma correction circuit; and

a plurality of photosensors provided over said substrate for changing an output voltage of the gamma correction circuit in accordance with a brightness of a surrounding.

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2. (Original) A display device according to claim 1, wherein said display device is a liquid crystal display device or an electroluminescence display device.

3. (Original) A display device according to claim 1, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

4. (Original) A display device according to claim 1, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

5 - 8. (Canceled)

9. (Currently Amended) A display device comprising:

a substrate having a display portion;

a plurality of photosensors provided over the display portion for detecting a brightness of a surrounding; and

a gamma correction circuit provided over said substrate for outputting a voltage for determining a period that a pixel is in a light state in accordance with electrical signals from said plurality of photosensors.

10. (Original) A display device according to claim 9, wherein said display device is a liquid crystal display device or an electroluminescence display device.

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11. (Original) A display device according to claim 9, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

12. (Original) A display device according to claim 9, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

13. (Previously Presented) A display device comprising:

a plurality of photosensors provided over a peripheral portion of a substrate;

a source follower circuit connected with said plurality of photosensors;

a gamma correction circuit connected with said source follower circuit;

an image signal processing circuit connected with said gamma correction circuit;

a source signal line driver circuit connected with said image signal processing circuit; and
a pixel portion which is connected with said source signal line driver circuit and formed
over said substrate.

14. (Original) A display device according to claim 13, wherein said pixel portion has at
least a pixel electrode, a liquid crystal layer, and a counter electrode.

15. (Original) A display device according to claim 13, wherein said pixel portion has at
least a pixel electrode and a light emitting layer.

16. (Original) A display device according to claim 13, wherein each of said photosensors
has a photoelectric conversion layer comprising amorphous silicon.

17. (Original) A display device according to claim 13, wherein said display device is
incorporated into an electronic equipment selected from the group consisting of a video camera,
a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a
personal computer, and a portable information terminal.

18. (Previously Presented) A display device comprising:
a first substrate;
a second substrate;
a plurality of photosensors which are formed over said second substrate and fixed to an
outer portion of said first substrate;
a source follower circuit connected with said plurality of photosensors;
a gamma correction circuit connected with said source follower circuit;

an image signal processing circuit connected with said gamma correction circuit;
a source signal line driver circuit connected with said image signal processing circuit; and
a pixel portion which is connected with said source signal line driver circuit and formed
over said first substrate.

19. (Original) A display device according to claim 18, wherein said pixel portion has at
least a pixel electrode, a liquid crystal layer, and a counter electrode.

20. (Original) A display device according to claim 18, wherein said pixel portion has at
least a pixel electrode and a light emitting layer.

21. (Original) A display device according to claim 18, wherein each of said photosensors
has a photoelectric conversion layer comprising amorphous silicon.

22. (Original) A display device according to claim 18, wherein said display device is
incorporated into an electronic equipment selected from the group consisting of a video camera,
a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a
personal computer, and a portable information terminal.

23. (Currently Amended) A display device comprising:
a substrate having a display portion;
a gamma correction circuit formed adjacent said substrate;
an image signal processing circuit formed adjacent said substrate and connected with an
output line of said gamma correction circuit; and

a plurality of photosensors formed adjacent said substrate for changing an output voltage of the gamma correction circuit in accordance with a brightness of a surrounding,

wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

24. (Original) A display device according to claim 23, wherein said display device is a liquid crystal display device or an electroluminescence display device.

25. (Original) A display device according to claim 23, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

26. (Original) A method of manufacturing a display device, comprising the steps of:
forming a pixel portion using a thin film transistor on a first substrate;
forming a photosensor on a second substrate; and
fixing the second substrate to said first substrate.

27. (Original) A method of manufacturing a display device according to claim 26, wherein in the pixel portion at least, a pixel electrode, a liquid crystal layer, and a counter electrode are formed.

28. (Original) A method of manufacturing a display device according to claim 26, wherein in the pixel portion, at least a pixel electrode and a light emitting layer are formed.

29. (Original) A method of manufacturing a display device according to claim 26, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

30. (Original) A method of manufacturing a display device according to claim 26, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

31. (Original) A method of manufacturing a display device, comprising the steps of:
forming a pixel portion, a driver circuit for driving said pixel portion, and a control circuit for controlling a brightness of said pixel portion, using a thin film transistor, on a first substrate;
forming a photosensor on a second substrate; and
fixing said second substrate to said first substrate to electrically connect said control circuit with said photosensor.

32. (Original) A method of manufacturing a display device according to claim 31, wherein in the pixel portion at least, a pixel electrode, a liquid crystal layer, and a counter electrode are formed.

33. (Original) A method of manufacturing a display device according to claim 31, wherein in the pixel portion, at least a pixel electrode and a light emitting layer are formed.

34. (Original) A method of manufacturing a display device according to claim 31, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

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35. (Original) A method of manufacturing a display device according to claim 31, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.
